Atty Dkt. No.: UCSF-305CON4

USSN: 10/648,619

IB. AMENDMENTS TO THE CLAIMS

Please enter new claims 23-29, as shown below.

1. (withdrawn) A method for activating a *trk* receptor comprising exposing cells having the *trk* receptor to a multivalent immunoglobulin which binds to the receptor and activates the receptor.

- 2. (withdrawn) A method of claim 1 wherein the *trk* receptor is selected from the group consisting of *trkA*, *trkB*, and *trkC*.
- 3. (withdrawn) A method of claim 1 wherein the immunoglobulin induces at least one member of the group consisting of an increase in phosphorylation of the receptor, an" increase in phosphorylation of a protein substrate that is phosphorylated in response to activation of the receptor, and promotion of an effector function of receptor activation.
- 4. (withdrawn) A method of claim 3 wherein the effector function is a member of the group consisting of promotion of neuronal survival, promotion of neuronal differentiation, and improved neuronal function.
 - 5. (withdrawn) A method of claim 1 wherein the immunoglobulin is bivalent.
 - 6. (withdrawn) A method of claim 1 wherein the immunoglobulin is a monoclonal antibody.
- 7. (original) A method of therapy for a neurologic disorder associated with suboptimal activity of a *trk* receptor, said method comprising administering to a mammal having the disorder a therapeutically effective amount of a multivalent immunoglobulin which activates the receptor.
- 8. (original) A method of claim 7 wherein the *trk* receptor is selected from the group consisting of *trkA*, *trkB*, and *trkC*.
- 9. (original) A method of claim 7 wherein the immunoglobulin induces an increase in phosphorylation of the receptor thereby activating the receptor.
- 10. (original) A method of claim 7 further comprising the step of administering at least one of an additive and a diluent simultaneously with the immunoglobulin.

Atty Dkt. No.: UCSF-305CON4

USSN: 10/648,619

11. (original) A method of claim 7 wherein the effective amount is from about $0.1 \mu g$ to about 1 mg per kg body weight of the mammal.

- 12. (original) A method of claim 7 wherein the administration is selected from the group consisting of intravenous, intraventricular, and parenteral pump implant administration.
 - 13. (original) A method of claim 7 wherein the immunoglobulin is a bivalent monoclonal antibody.
- 14. (original) A method of claim 7 wherein the disorder- is selected from the group consisting of Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, peripheral neuropathy, nervous system cancer, cerebral ischemia, nerve tissue ischemia and epilepsy.
- 15. (original) A method of claim 14 wherein the nervous system cancer is selected from the group consisting of primitive neuroectodermal tumors, neuroblastomas, medullofalastomas, ganglioneuromas, Swing's sarcoma, gliomas, glioblastomas and astrocytomas.
- 16. (withdrawn) A method for diagnosing a neurologic disorder associated by suboptimal activity of a *trk* receptor, said method comprising:
 - (a) obtaining a nerve cellular sample;
- (b) exposing the sample to a bivalent iminunoglobulin which (1) binds to the receptor and (2) induces an increase in the phosphorylation of the receptor; and
 - $(c) \ assaying \ the \ sample \ for \ (1) \ binding \ to \ the \ bivalent \ immunoglobulin \ and \ (2) \ increased \ phosphorylation.$
 - 17. (withdrawn) A method of claim 16 wherein the nerve cellular sample is from the peripheral nervous system.
 - 18. (withdrawn) A method for determining whether cellular material has a *trk* receptor comprising:
- (a) exposing the cellular material to a bivalent immunoglobulin which (1) binds to the receptor and (2) induces an increase in phosphorylation of the receptor; and
- (b) assaying the cellular material for (1) binding to the bivalent immunoglobulin and (2) increased phosphorylation.
- 19. (withdrawn) A multivalent immunoglobulin which binds to a *trk* receptor and functions as an agonist to the receptor.
 - 20. (withdrawn) An immunoglobulin of claim 19 wherein the receptor is selected from the group consisting of

Atty Dkt. No.: UCSF-305CON4

USSN: 10/648,619

trkA, trkB, and trkC.

21. (withdrawn) A monovalent immunoglobulin which binds to a trk receptor and blocks activation of the receptor.

22. (withdrawn) A method for blocking activation of a trk receptor comprising subjecting the receptor to a

monovalent immunoglobulin that binds the receptor.

23. (New) A method of treating a neurologic disorder associated with suboptimal activity of a trk receptor, said

method comprising administering to a mammal having the disorder a therapeutically effective amount of a multivalent

immunoglobulin which activates the receptor, wherein the disorder is selected from the group consisting of Alzheimer's disease,

Parkinson's disease, amyotrophic lateral sclerosis, peripheral neuropathy, cerebral ischemia, nerve tissue ischemia and

epilepsy.

24. (New) The method of claim 23, wherein the trk receptor is trk4, trkB, or trkC.

25. (New) The method of claim 23, wherein the effective amount is from about 0.1 μg to about 1 mg per kg

body weight of the mammal.

26. (New) The method of claim 23, wherein the administration is selected from intravenous, intramuscular,

intraventricular, and parenteral pump implant administration.

27. (New) The method of claim 23, wherein said mammal is a human.

28. (New) The method of claim 23, wherein the immunoglobulin is a bivalent monoclonal antibody.

29. (New) The method of claim 7, wherein said mammal is a human.

6